- (1) promote food security and economic growth in eligible countries by—
 - (A) educating a new generation of agricultural scientists;
 - (B) increasing scientific knowledge and collaborative research to improve agricultural productivity; and
 - (C) extending that knowledge to users and intermediaries in the marketplace; and

(2) shall 1 support—

- (A) training and collaborative research opportunities through exchanges for entry level international agricultural research scientists, faculty, and policymakers from eligible countries:
- (B) collaborative research to improve agricultural productivity;
- (C) the transfer of new science and agricultural technologies to strengthen agricultural practice; and
- (D) the reduction of barriers to technology adoption.

(d) Fellowship recipients

(1) Eligible candidates

The Secretary may provide fellowships under this section to individuals from eligible countries who specialize or have experience in agricultural education, research, extension, or related fields, including—

- (A) individuals from the public and private sectors; and
 - (B) private agricultural producers.

(2) Candidate identification

The Secretary shall use the expertise of United States land-grant colleges and universities and similar universities, international organizations working in agricultural research and outreach, and national agricultural research organizations to help identify program candidates for fellowships under this section from the public and private sectors of eligible countries.

(e) Use of fellowships

A fellowship provided under this section shall be used— $\,$

(1) to promote collaborative programs among agricultural professionals of eligible countries, agricultural professionals of the United States, the international agricultural research system, and, as appropriate, United States entities conducting research; and

(2) to support fellowship recipients through programs described in subsection (a)(2).

(f) Program implementation

The Secretary shall provide for the management, coordination, evaluation, and monitoring of the Borlaug International Agricultural Science and Technology Fellowship Program and for the individual programs described in subsection (a)(2), except that the Secretary may contract out to 1 or more collaborating universities the management of 1 or more of the fellowship programs.

(g) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section, to remain available until expended.

(Pub. L. 95–113, title XIV, §1473G, as added Pub. L. 110–234, title VII, §7139, May 22, 2008, 122 Stat. 1231, and Pub. L. 110–246, §4(a), title VII, §7139, June 18, 2008, 122 Stat. 1664, 1992.)

CODIFICATION

Pub. L. 110-234 and Pub. L. 110-246 enacted identical sections. Pub. L. 110-234 was repealed by section 4(a) of Pub. L. 110-246.

EFFECTIVE DATE

Enactment of this section and repeal of Pub. L. 110–234 by Pub. L. 110–246 effective May 22, 2008, the date of enactment of Pub. L. 110–234, see section 4 of Pub. L. 110–246, set out as a note under section 8701 of this title.

SUBCHAPTER XI—AQUACULTURE

§ 3321. Statement of purpose

It is the purpose of this subchapter to promote research and extension activities of the institutions hereinafter referred to in section 3322(b) of this title, and to coordinate their efforts as an integral part in the implementation of the National Aquaculture Act of 1980 (16 U.S.C. 2801 et seq.) by encouraging landowners, individuals, and commercial institutions to develop aquaculture production and facilities and sound aquacultural practices that will, through research and technology transfer programs, provide for the increased production and marketing of aquacultural food products.

(Pub. L. 95–113, title XIV, §1474, as added Pub. L. 97–98, title XIV, §1440(a), Dec. 22, 1981, 95 Stat. 1316.)

REFERENCES IN TEXT

The National Aquaculture Act of 1980, referred to in text, is Pub. L. 96–362, Sept. 26, 1980, 94 Stat. 1198, which is classified generally to chapter 48 (§2801 et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see Short Title note set out under section 2801 of Title 16 and Tables.

EFFECTIVE DATE

Subchapter effective Dec. 22, 1981, see section 1801 of Pub. L. 97-98, set out as a note under section 4301 of this title.

§ 3322. Assistance programs

(a) Research and extension program

The Secretary may develop and implement a cooperative research and extension program to encourage the development, management, and production of important aquatic food species within the several States and territories of the United States and to enhance further the safety of food products derived from the aquaculture industry, in accordance with the national aquaculture development plan, and revisions thereto, developed under the National Aquaculture Act of 1980 [16 U.S.C. 2801 et seq.].

(b) Grants

The Secretary may make grants to—

- (1) land-grant and sea grant colleges and universities:
 - (2) State agricultural experiment stations;
- (3) colleges, universities, and Federal laboratories having a demonstrable capacity to conduct aquacultural research, as determined by the Secretary; and

¹So in original. The word "shall" probably should not appear.

(4) nonprofit private research institutions;

for research and extension to facilitate or expand promising advances in the production and marketing of aquacultural food species and products and to enhance further the safety and wholesomeness of those species and products, including the development of reliable supplies of seed stock and therapeutic compounds. Except in the case of Federal laboratories, no grant may be made under this subsection unless the State in which the grant recipient is located makes a matching grant (of which amount an in-kind contribution may not exceed 50 percent) to such recipient equal to the amount of the grant to be made under this subsection, and unless the grant is in implementation of the national aquaculture development plan, and revisions thereto, developed under the National Aquaculture Act of 1980 [16 U.S.C. 2801 et seq.].

(c) Aquaculture development plans

The Secretary may assist States to formulate aquaculture development plans for the enhancement of the production and marketing of aquacultural species and products from such States and may make grants to States on a matching basis, as determined by the Secretary. The aggregate amount of the grants made to any one State under this subsection may not exceed \$50,000. The plans shall be consistent with the national aquaculture development plan, and revisions thereto, developed under the National Aquaculture Act of 1980 [16 U.S.C. 2801 et seq.].

(d) Aquacultural centers

To provide for aquacultural research, development, and demonstration projects having a national or regional application, the Secretary may establish in existing Federal facilities or in cooperation with any of the non-Federal entities specified in subsection (b) of this section up to five aquacultural research, development, and demonstration centers in the United States for the performance of aquacultural research, extension work, and demonstration projects. Funds made available for the operation of such regional centers may be used for the rehabilitation of existing buildings or facilities to house such centers, but may not be used for the construction or acquisition of new buildings or facilities. To the extent practicable, the aquaculture research, development, and demonstration centers established under this subsection shall be geographically located so that they are representative of the regional aquaculture opportunities in the United States. To the extent practicable, the Secretary shall ensure that equitable efforts are made at these centers in addressing the research needs of those segments of the domestic aquaculture industry located within that region.

(e) Listing of laws on aquaculture

The interagency aquaculture coordinating group established under section 6(a) of the National Aquaculture Act of 1980 (16 U.S.C. 2805(a)) shall, in consultation with appropriate Federal and State agencies, compile a listing of Federal and State laws, rules, and regulations materially affecting the production, processing, marketing, and transportation of aquaculturally produced commodities and the products thereof. The interagency aquaculture coordinating group shall make such listing available to the public not later than January 1, 1992, and shall update and revise such listing not later than January 1, 1996, to show such laws, rules, and regulations as in effect on that date.

(f) Fish disease program

The Secretary shall implement, in consultation with the Joint Subcommittee on Aquaculture referred to in section 6 of the National Aquaculture Act of 1980 (16 U.S.C. 2805), a fish disease program to include the development of new diagnostic procedures for fish diseases, the determination of the effect of water environment on the development of the fish immune system, and the development of therapeutic, synthetic, or natural systems, for the control of fish diseases.

(Pub. L. 95-113, title XIV, §1475, as added Pub. L. 97-98, title XIV, §1440(a), Dec. 22, 1981, 95 Stat. 1316; amended Pub. L. 99-198, title XIV, §1429(a), Dec. 23, 1985, 99 Stat. 1555; Pub. L. 101-624, title XVI. §1614(a), Nov. 28, 1990, 104 Stat. 3727; Pub. L. 104-66, title I, $\S 1011(u)$, Dec. 21, 1995, 109 Stat. 711; Pub. L. 104-127, title VIII, §820(b), Apr. 4, 1996, 110 Stat. 1168.)

References in Text

The National Aquaculture Act of 1980, referred to in subsecs. (a), (b), and (c), is Pub. L. 96-362, Sept. 26, 1980, 94 Stat. 1198, which is classified generally to chapter 48 (§2801 et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see Short Title note set out under section 2801 of Title 16 and Tables.

AMENDMENTS

1996—Subsecs. (e) to (g). Pub. L. 104-127 redesignated subsecs. (f) and (g) as (e) and (f), respectively, and struck out heading and text of former subsec. (e) Text read as follows: "Not later than March 1 of each year, the Secretary shall submit a report to the President, the House Committee on Agriculture, the House Committee on Merchant Marine and Fisheries, the House Committee on Appropriations, the Senate Committee on Agriculture, Nutrition, and Forestry, and the Senate Committee on Appropriations, containing a summary outlining the progress of the Department of Agriculture in meeting the purposes of the programs established under this subchapter.'

1995—Subsec. (e). Pub. L. 104-66 struck out "(1)" before "Not later than" and struck out par. (2) which required Secretary to conduct a study assessing economic impact of animal damage to the United States aquaculture industry.

1990—Subsec. (a). Pub. L. 101-624, §1614(a)(1), inserted heading and substituted "United States and to enhance further the safety of food products derived from the aquaculture industry," for "United States,".

Subsec. (b). Pub. L. 101-624, §1614(a)(2), inserted heading, inserted "and sea grant" after "land-grant" in par. (1), and inserted before period at end "and to enhance further the safety and wholesomeness of those species and products, including the development of reliable supplies of seed stock and therapeutic compounds".

Subsec. (c). Pub. L. 101-624, §1614(a)(3), inserted head-

Subsec. (d). Pub. L. 101-624, §1614(a)(4), inserted heading, substituted "five aquacultural" for "four aquacultural", and inserted at end "To the extent practicable, the Secretary shall ensure that equitable efforts are made at these centers in addressing the research needs of those segments of the domestic aquaculture industry located within that region.'

Subsec. (e). Pub. L. 101-624, §1614(a)(5), inserted heading, designated existing provisions as par. (1), substituted "Not later than March 1 of each year," for "Not later than one year after the effective date of this subchapter and not later than March 1 of each subsequent year,", and added par. (2).

Subsecs. (f), (g). Pub. L. 101-624, §1614(a)(6), added subsecs. (f) and (g).

1985—Subsec. (b). Pub. L. 99-198, §1429(a)(1), (2), added par. (4) and inserted "(of which amount an in-kind contribution may not exceed 50 percent)" after "matching grant".

Subsec. (d). Pub. L. 99-198, §1429(a)(3), (4), substituted in first sentence "any of the non-Federal entities specified in subsection (b) of this section" for "State agencies (including State departments of agriculture), and land-grant colleges and universities," and inserted provision respecting geographic location of aquaculture research, development, and demonstration centers.

Subsec. (e). Pub. L. 99–198, \$1429(a)(5), inserted "the House Committee on Merchant Marine and Fisheries,".

§ 3323. Repealed. Pub. L. 105-185, title III, § 302(a), June 23, 1998, 112 Stat. 563

Section, Pub. L. 95-113, title XIV, §1476, as added Pub. L. 101-624, title XVI, §1614(b)(1), Nov. 28, 1990, 104 Stat. 3728; amended Pub. L. 104-127, title VIII, §820(c), Apr. 4, 1996, 110 Stat. 1168, authorized grants and appropriations for acquaculture research facilities.

A prior section 3323, Pub. L. 95-113, title XIV, §1476, as added Pub. L. 97-98, title XIV, §1440(a), Dec. 22, 1981, 95 Stat. 1317, related to establishment, duration, and meetings of Aquaculture Advisory Board, and appointment and compensation of Board members, prior to repeal by Pub. L. 99-198, title XIV, §1429(b), Dec. 23, 1985, 99 Stat. 1556.

§ 3324. Authorization of appropriations

There is authorized to be appropriated \$7,500,000 for each of the fiscal years 1991 through 2012. Funds appropriated under this section or section 33231 of this title may not be used to acquire or construct a building.

(Pub. L. 95–113, title XIV, $\S1477$, as added Pub. L. 97-98, title XIV, §1440(a), Dec. 22, 1981, 95 Stat. 1318; amended Pub. L. 99-198, title XIV, §1429(c), Dec. 23, 1985, 99 Stat. 1556; Pub. L. 101-624, title XVI, §1614(c), Nov. 28, 1990, 104 Stat. 3728; Pub. L. 104-127, title VIII, §820(d), Apr. 4, 1996, 110 Stat. 1168; Pub. L. 105-185, title III, §301(a)(15), June 23, 1998, 112 Stat. 562; Pub. L. 107-171, title VII, §7116, May 13, 2002, 116 Stat. 433; Pub. L. 110–234, title VII, §7140, May 22, 2008, 122 Stat. 1232; Pub. L. 110–246, $\S4(a),$ title VII, $\S7140,$ June 18, 2008, 122 Stat. 1664, 1993.)

REFERENCES IN TEXT

Section 3323 of this title, referred to in text, was repealed by Pub. L. 105-185, title III, §302(a), June 23, 1998, 112 Stat. 563.

CODIFICATION

Pub. L. 110-234 and Pub. L. 110-246 made identical amendments to this section. The amendments by Pub. L. 110-234 were repealed by section 4(a) of Pub. L. 110-246.

AMENDMENTS

2008-Pub. L. 110-246, §7140, substituted "2012" for

2002—Pub. L. 107-171 substituted "2007" for "2002".

1998—Pub. L. 105-185 substituted "2002" for "1997" 1996—Pub. L. 104–127 substituted "1997" for "1995"

1990-Pub. L. 101-624 substituted "each of the fiscal

years 1991 through 1995" for "each fiscal year beginning

after the effective date of this subchapter, and ending with the fiscal year ending September 30, 1990" and inserted at end "Funds appropriated under this section or section 3323 of this title may not be used to acquire or construct a building."

1985—Pub. L. 99-198 in amending section generally, struck out subsec. (a) designation, substituted "fiscal year ending September 30, 1990" for "fiscal year ending September 30, 1985, and not in excess of such sums as may after December 22, 1981, be authorized by law for any subsequent fiscal year", and struck out subsec. (b) relating to allocation of funds and consultations by Secretary with Board in development of plans for use of funds.

EFFECTIVE DATE OF 2008 AMENDMENT

Amendment of this section and repeal of Pub. L. 110-234 by Pub. L. 110-246 effective May 22, 2008, the date of enactment of Pub. L. 110-234, see section 4 of Pub. L. 110-246, set out as an Effective Date note under section 8701 of this title.

SUBCHAPTER XII—RANGELAND RESEARCH

§ 3331. Congressional statement of purpose

It is the purpose of this subchapter to promote the general welfare through improved productivity of the Nation's rangelands, which comprise 60 per centum of the land area of the United States. Most of these rangelands are unsuited for cultivation, but produce a great volume of forage that is inedible by humans but readily converted, through an energy efficient process, to high quality food protein by grazing animals. These native grazing lands are located throughout the United States and are important resources for major segments of the Nation's livestock industry. In addition to the many livestock producers directly dependent on rangelands, other segments of agriculture are indirectly dependent on range-fed livestock and on range-produced forage that can be substituted for grain in times of grain scarcity. Recent resource assessments indicate that forage production of rangeland can be increased at least 100 per centum through development and application of improved range management practices while simultaneously enhancing wildlife, watershed, recreational, and aesthetic values and reducing hazards of erosion and flooding.

(Pub. L. 95-113, title XIV, §1478, as added Pub. L. 97-98, title XIV, §1440(a), Dec. 22, 1981, 95 Stat. 1318.)

EFFECTIVE DATE

Subchapter effective Dec. 22, 1981, see section 1801 of Pub. L. 97-98, set out as a note under section 4301 of this title.

§ 3332. Program; development, purposes, scope,

The Secretary may develop and implement a cooperative rangeland research program in coordination with the program carried out under the Renewable Resources Extension Act of 1978 [16 U.S.C. 1671 et seq.], to improve the production and quality of desirable native forages or introduced forages which are managed in a similar manner to native forages for livestock and wildlife. The program shall include studies of: (1) management of rangelands and agricultural land as integrated systems for more efficient utilization of crops and waste products in the

¹ See References in Text note below.